

**From:** [Ballew, Mary](#)  
**To:** [Casey, Carolyn](#)  
**Subject:** RE: populations  
**Date:** Tuesday, March 26, 2019 12:33:44 PM

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**Remedy decision guidance and what a risk manager can do – sensitive subgroups mentioned as part of the discussion of the risk range.**

**<https://semspub.epa.gov/work/HQ/130917.pdf>**

**Software that explains EPA's risk assessment approach—not guidance but may cite guidance. This is a teaching tool developed by a contractor.**

**<https://www.epa.gov/expobox/exposure-assessment-tools-lifestages-and-populations-highly-exposed-or-other-susceptible>**

**A military attempt to estimate the risk to subpopulations quantitatively for a few air contaminants—this is for a large exposed population, not a site. EPA would probably not use this approach but it gives an idea about how one could approach it if quantitative information was available.**

**<https://www.ncbi.nlm.nih.gov/books/NBK230428/>**

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**From:** Casey, Carolyn  
**Sent:** Tuesday, March 26, 2019 11:40 AM  
**To:** Ballew, Mary <ballew.mary@epa.gov>  
**Subject:** RE: populations

Maybe this is enough.... **Our risk characterization guidance talks a lot about sensitive populations which would apply to all routes of exposure.**

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**From:** Ballew, Mary  
**Sent:** Tuesday, March 26, 2019 11:24 AM  
**To:** Casey, Carolyn <[Casey.Carolyn@epa.gov](mailto:Casey.Carolyn@epa.gov)>  
**Subject:** RE: populations

**I can take a look around in the literature. We have too few toxicity values for indoor air chemicals so it might be hard to find something that addresses sensitive populations in EPA specifically for air—we don't have enough values for the general population. Our risk characterization guidance talks a lot about sensitive populations which would apply to all routes of exposure. I will send you something this afternoon if I find it.**  
**Mary**

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**From:** Casey, Carolyn  
**Sent:** Tuesday, March 26, 2019 9:14 AM  
**To:** Ballew, Mary <[ballew.mary@epa.gov](mailto:ballew.mary@epa.gov)>  
**Subject:** RE: populations

Thanks for the comments. I was out yesterday but am going through them now. Is there anything more relevant than this drinking water document since we are talking indoor air here?

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**From:** Ballew, Mary  
**Sent:** Friday, March 22, 2019 4:39 PM  
**To:** Rodriguez, Sebastian <[rodriguez.sebastian@epa.gov](mailto:rodriguez.sebastian@epa.gov)>; Casey, Carolyn <[Casey.Carolyn@epa.gov](mailto:Casey.Carolyn@epa.gov)>  
**Subject:** populations

**FYI**

[Report to Congress EPA Studies on Sensitive Subpopulations and ...](#)

[nepis.epa.gov/Exe/ZyPURL.cgi?Dockkey=20001YPX.TXT](https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockkey=20001YPX.TXT)

Sensitive subpopulations are defined in this report as groups of individuals who respond biologically at lower levels of exposure to a contaminant in drinking ...

